

Sustainable Inquiry Research and Education Network (SIREN) for Science and Vocational Agriculture Teachers

Soils

Independent Variables

- Soil temperature differential/residue influence on planting date
- Soil type influence on temperature
- Soil H₂O content influence as a result of tillage/residue
- Organic matter influence by...?
- Microbial profile influence difference beans \leftrightarrow small grains

Topics/Questions

1. Is there a difference in soil structure, biodiversity (ridge till, no till, minimum till, conventional), and organic matter?
2. How does manure influence the above?
3. How do different crops affect all of the above?
4. How do mono-cultures affect the life of the soil?
5. How does residue removal affect crops?
6. What positive influences do weeds have on the health of soil?
7. Are earthworms vital to healthy soil?
8. How do soil insecticides contribute to the health of soil?
9. Why is there so much soil going down the Mississippi River?
10. Does residue affect seed germination left on land?